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LETTER OF TRANSMITTAL

To: NJDEP-BEECRA

401 East State Street

Trenton, NJ 08625

Date:	10/30/96	Job No.:	94039 T1
Attention:	Joseph J. Nowak		
Re:	Hexcel Corporation		
	Lodi Borough, Bergen County, NJ		
	ISRA Case No. 86009		

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3	7/29/96	Progress Report from GEO Engineering to NJDEP

Remarks:

OCT 3 1996

COPY TO:

A. William Nosil

Lisa M. Bromberg

James Higdon

SIGNED:

Sunila Gupta
Sunila Gupta

If enclosures are not as noted, kindly notify us at once.

SDMS Document



88256

October 30, 1996

Joseph J. Nowak
New Jersey Department of Environmental Protection
Bureau of Environmental Evaluation and Cleanup Responsibility Assessment
CN 432
401 East State Street
Trenton, NJ 08625

SUBJ: Hexcel Corporation
Lodi Borough, Bergen County, New Jersey
ISRA Case No. 86009
GEO Project No. 94039

Dear Mr. Nowak:

On behalf of Hexcel Corporation (Hexcel), the following is the progress report of activities carried out during July, August and September of 1996. This quarterly report is prepared in accordance with the Industrial Site Recovery Act (ISRA) requirements for the former Hexcel facility in Lodi, New Jersey.

The following topics are discussed in this progress report:

1. Ground Water/DNAPL/LNAPL Monitoring
 - a) Quarterly Monitoring
 - b) Monthly Monitoring
2. Product Recovery Program
 - a) DNAPL Recovery
 - b) LNAPL Recovery
3. Ground Water Treatment System
 - a) Evaluation and Testing of Ground Water Recovery System
 - b) Treatment and Disposal of Basement Seepage Water
4. Soil Investigation/Remediation
5. Off-Site Investigation

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6. Stream Sediment Sampling
7. Waste Disposal Documentation
8. Schedule and Cost Estimates

1. Ground Water/DNAPL/LNAPL Monitoring

This section includes the results of quarterly monitoring performed in July 1996, and monthly monitoring performed in August and September 1996. Modifications to the NJDEP approved "Groundwater/DNAPL/LNAPL Monitoring Plan" prepared by Killam Associates had been presented in our progress report dated October 24, 1994. The modifications were approved by the NJDEP in its June 12, 1995 letter. Sections 1a and 1b provide details for quarterly and monthly monitoring, respectively.

1a. Quarterly Monitoring

Hexcel conducted quarterly ground water elevation, DNAPL and LNAPL monitoring on July 11, 1996 in accordance with the monitoring plan. Results of the quarterly monitoring are tabulated in Table 1. Figures 1 and 2 illustrate shallow and deep ground water elevation contours respectively. Contour Map Reporting Forms are enclosed for each of the contour maps. Table 2 contains a summary of well construction data to accompany the Contour Map Reporting Form for Figure 1. Figures 1 and 2, Tables 1 and 2, and the reporting forms are located in Appendix A.

1b. Monthly Monitoring

In addition to the quarterly monitoring conducted in July, Hexcel conducted monthly DNAPL and LNAPL monitoring on August 29 and September 23, in accordance with the monitoring plan and modifications approved by the NJDEP in its June 12, 1995 letter. Additionally, the following modifications were made to the monthly monitoring plan this quarter:

- MW-23: MW-23 was removed from the monthly monitoring program in September subsequent to non-detection of LNAPL for three consecutive months in May, June and July. A product interface-meter probe did not register presence of LNAPL in the well and visual inspection of the probe confirmed this. Although MW-23 could have been removed from the monthly program in August, it was inadvertently monitored in August also and did not indicate presence of LNAPL.

Results for August and September monthly monitoring are provided in Tables 3 and 4 located in Appendix B.

Hexcel will continue to modify the monthly monitoring by the addition or deletion of wells in accordance with the approved plan.

2. Product Recovery Program

This section includes results for the temporary product recovery program currently being implemented at the site. This product recovery program, consisting of manually recovering product from affected wells on a weekly basis, was initiated on October 20, 1994. After one month, the program's frequency was reduced to twice a month due to a reduction in the quantity of product recovered. Product recovery continued at the rate of at least twice a month through the week of June 19, 1995. In accordance with the NJDEP's June 12, 1995 letter, weekly product recovery was resumed the week of June 26, 1995.

NJDEP approved the modifications to the weekly product recovery program for LNAPL and DNAPL in its May 23, 1996 letter. Hexcel modified the weekly product recovery program by revising the criteria for inclusion of wells in the program. The modifications were communicated to the NJDEP in a letter dated September 21, 1995 and also in the October 1995 progress report. According to the modifications, any well which has no measurable recovery for three consecutive weekly recovery rounds will be moved to monthly monitoring and recovery. For the purposes of product collection, quantities greater than 0.1 gallon (approximately 1 cup) are considered to be measurable.

2a. DNAPL Recovery

During the third quarter of 1996, although DNAPL monitoring was performed each of the thirteen weeks, recoverable amounts of DNAPL were detected and recovered only once from PB-2 and twice from MW-6. DNAPL recovery during the third quarter of 1996 is summarized in Table 5, located in Appendix C.

2b. LNAPL Recovery

During the third quarter of 1996, LNAPL was recovered in small quantities (0.1-0.3 gallons) from CW-7. Results for LNAPL recovery are summarized in Table 6 located in Appendix C.

3. Ground Water Treatment System

This section includes documentation of Hexcel's efforts regarding evaluation and operation of the existing ground water treatment system. The following subsections provide the details.

3a. Evaluation and Testing of Ground Water Recovery System

The schedule provided in Table 7 (Appendix D) of this progress report includes current estimates for the testing of the system, modifications to the design of the system and reporting the design proposal to the NJDEP. Hexcel has begun the pilot test and will include results in future reports.

Pilot Test Permit

Hexcel received the air permit to perform the pilot test of the existing ground water recovery system on August 2, 1996. Hexcel has, since then, been designing and preparing for the pilot test.

3b. Treatment of Basement Seepage Water

Basement seepage water continues to be treated on-site and discharged to the Passaic Valley Sewerage Commissioners (PVSC) sewer line. PVSC issued a permit on May 16, 1996, authorizing Hexcel to discharge treated water into the PVSC sewer line.

4. Soil Investigation/Remediation

As we have discussed in our telephone conversations with you and as reflected in our estimated schedule, Hexcel has proposed that further soil investigation and, if necessary, remediation will be conducted after hydraulic control is achieved at the site. Review of the soil data indicates that the soil contamination in the vadose zone is limited in extent. Presence of LNAPL and DNAPL on the site would continue to affect the soil conditions even after soil remediation. Therefore, soil remediation prior to source control would be ineffective for the long term remediation goals for the site.

5. Off-Site Investigation

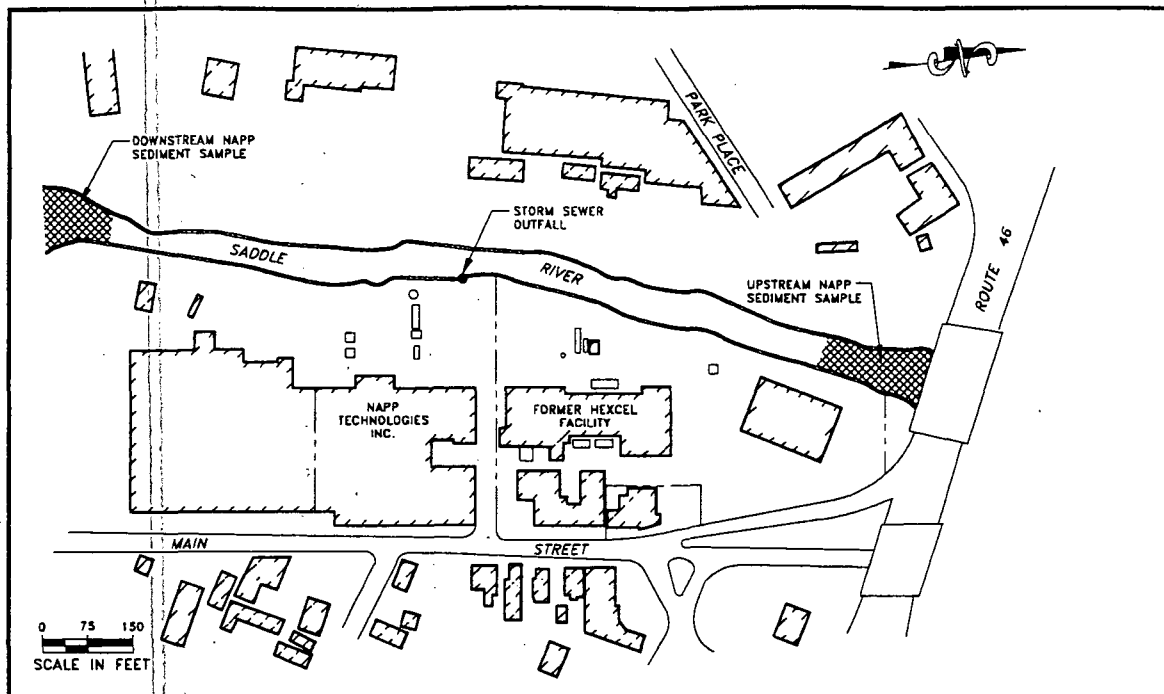
Hexcel has approached the U.S. Army Corps of Engineers (Army Corps) to obtain permission to survey the well and measure the depth to bottom for the well installed by the Army Corps across the Saddle River from the Hexcel site. The boring log, location and chemical analyses data from this well were provided to the NJDEP in the progress report dated October 27, 1995. During our recent conversation with the Army Corps, the Army Corps was uncertain regarding the availability of the well for sampling. We have tried to contact the Army Corps over the phone and have recently written a letter requesting information on the availability of the well for sampling. We are awaiting a response from the Army Corps prior to proposing alternate ground water sampling across the Saddle River from the Hexcel site.

6. Stream Sediment Sampling

This section is a report on recent sediment sampling that indicates the stream sediment has not been adversely affected by discharge from the storm sewer near Hexcel and Napp Technologies, Inc. (Napp). As a part of its review of Hexcel's August 1993 Monthly Progress Report, the NJDEP commented on the results of sampling conducted at the storm sewer outfall by Hexcel. The NJDEP requested that Hexcel collect additional sediment samples from the Saddle River downstream of the storm sewer outfall in order to determine if discharge from the Hexcel property contributed PCBs to river sediments (NJDEP, 9/15/94 correspondence to Porzio, Bromberg & Newman). Napp recently completed sediment sampling and testing that included the Hexcel property and provided sufficient data to satisfy the sediment sampling required of Hexcel.

The results of analytical sediment testing for PCBs, sediment toxicity testing and biological sampling completed along the Saddle River by Napp (Napp Technologies, Inc., Preliminary Assessment Report, February 1996) indicate that discharge from the storm sewer outfall near the Hexcel and Napp facilities has not adversely affected environmental conditions along the Saddle River. Napp sampled and tested sediment along the Saddle River in order to evaluate whether discharge from the storm sewer outfall located at the northwest part of their property has adversely affected river sediments or aquatic life along the river. The Napp sediment evaluation included analytical testing of sediments from the nearest depositional areas upstream and downstream of the Napp facility and an assessment of the biologic health of the river in the vicinity of the sediment sampling locations. The results of Napp's testing indicate that conditions upstream are similar to those downstream and, therefore, discharge from the storm sewer has not contaminated the sediments or adversely affected the biologic health of the stream.

Napp's sediment evaluation encompassed a stretch of the Saddle River extending from the upstream portion located behind the Hexcel facility, to the downstream portion located approximately 600 feet downstream of the storm sewer discharge pipe behind the Napp facility (refer to the following figure). This is the only storm sewer discharge pipe located behind the Napp and Hexcel properties. Napp's study encompassed both the Hexcel and Napp facilities and included testing for PCBs. This sampling and biological assessment thus satisfy the NJDEP's directive to Hexcel to collect sediment samples from the Saddle River downstream of the storm sewer outfall and to test for PCBs. Below, we present the results of field reconnaissance completed to verify Napp's sediment sampling locations and subsequent comparison of analytical testing results to the appropriate sediment screening criteria.



The Napp sediment samples were collected from depositional settings along the Saddle River and, therefore, they are representative of areas which receive and retain the greatest amounts of contaminants from upstream sources, including potential discharges from other industrial facilities located along the river. Field reconnaissance was completed to verify the general locations of Napp's sediment sampling. Napp reported that samples were collected approximately 600 feet upstream and downstream of the storm sewer discharge to the Saddle River. The storm sewer discharge was located (Appendix E: Photograph 1) behind the Napp facility, approximately 50-60 feet south of the chain link fencing that separates the Napp site and the Hexcel property. At approximately 600 to 700 feet downstream from the discharge pipe, the river widens to a breadth of approximately 90 feet. Here the river is characterized by riffles in the central part and shallow, slow-moving water closer to the banks. Fine sand and silt accumulated along the banks of the river indicate that this area is a depositional environment (Appendix E: Photograph 2). Similar conditions were observed between 600 to 800 feet upstream of the storm sewer discharge. The upstream vicinity is located below the Route 46 bridge which crosses the stream. Depositional environments characterized by slow-moving water and accumulation of fine sands and sediments were observed along the banks of the stream, and shallow faster-moving water was observed in the central part of the stream. This upstream depositional setting is upstream of known contaminated areas at the Hexcel facility. The river narrows in the downstream direction, eventually forming a straight, deep channel that passes behind the Hexcel and Napp properties. No depositional environments were observed along the river directly behind the Hexcel or Napp properties. Therefore the upstream and downstream sample locations selected by

Napp were appropriate because they were the depositional environments nearest to the storm sewer outfall.

Analytical testing results of Napp's sediment samples were compared against the appropriate sediment criteria currently used by the NJDEP for its sediment quality standards. These criteria, the Provincial Sediment Quality Guidelines for PCBs and Organochlorine Pesticides, were developed by the Ontario Ministry of Environment and Energy and published in August 1993 as Table 2a of *Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario*. The NJDEP Environmental Toxicology and Risk Assessment section (ETRA) recommended the selected sediment criteria for evaluating fresh water sediment quality rather than the criteria listed in the March 1991 *Guidance Document for Sediment Quality Evaluation* (NJDEP ETRA department, 1991).

The selected criteria consist of three screening levels (concentrations) for PCBs which define three levels of ecotoxic effects based on chronic, long term effects of PCBs on benthic organisms. The screening levels include a No Effect Level (NEL) at which no toxic effects to benthic organisms would be observed, a Lowest Effect Level (LEL) which can be tolerated by most benthic organisms, and a Severe Effect Level (SEL) above which detrimental effects to the majority of benthic organisms would be expected. The PCB screening levels are adjusted for the Total Organic Carbon (TOC) concentration of the sediment sample, and the actual PCBs concentration of the sample is compared to the adjusted screening criteria.

The sediment samples collected by Napp indicate that sediment quality satisfies the NJDEP-approved screening criteria. Total PCBs of 0.2 ppm and total organic carbon (TOC) of 7450 ppm were detected in the upstream sediment sample. The PCB concentration of the upstream sample exceeds the LEL of 0.01 ppm PCBs, but is well below the SEL of 3.95 ppm PCBs. PCBs were not detected in the downstream sediment sample. The PCBs testing results indicate that sediments downstream from the storm sewer outfall have not been adversely affected by discharges from the Hexcel facility and that PCBs detected in sediments from depositional areas in the vicinity of the Route 46 bridge were deposited from sources upstream of the Hexcel property.

No further sediment sampling or testing is proposed. Napp's analytical testing results are supported by the results of biological sampling completed by Napp which indicated moderately low values for density and diversity of macroinvertebrate organisms in the river. These testing and sampling results indicate that the river probably has received some pollution from unknown upstream sources, but the results also indicate that sediment quality in areas downstream from the storm sewer outfall is similar to slightly better than upstream. Therefore, the biological testing also demonstrates that the Hexcel facility has not adversely affected the sediment quality or biologic health of the river.

7. Waste Disposal Documentation

There was no disposal from the site in the third quarter of 1996 and, therefore, there is no disposal documentation for the months of July, August and September 1996.

8. Schedule and Cost Estimates

Table 7 located in Appendix D presents an updated estimate of the schedule of remaining remedial activities. There has been no change to date in the estimate of cleanup costs.

We will continue to submit quarterly progress reports according to the schedule. Please call us if you have any questions regarding the above.

Sincerely,

GEO ENGINEERING, INC.

Marjorie Piette
Marjorie A. Piette (SG)
Project Manager

MAP/III
Enclosures

cc: A. William Nosil
Lisa Bromberg, Esq.
James Higdon

Appendix A

TABLE 1: QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (7/11/96)

Former Hexcel Facility

Lodi, New Jersey

-All measurements in feet -

-All elevations in feet (NGVD)-

GEO Engineering

October 1996

File: 94039/wldata/Quartrly.xls

Entered by: SG Checked by: RMS

Well ID	Type	Depth to Water (7/11/96)	Depth to Product		Product Thickness	Depth to Bottom (7/11/96)	Elevation Top of Casing	Water Elevation	Well Construction (all 4" diameter unless otherwise noted)		
			DNAPL	LNAPL					Type	Casing	Comments
RW Series:											
RW1-1	shallow	4.91	--	--	--	14.30	28.24	23.33	flush	s.steel	
RW6-1	shallow	3.12	--	--	--	13.78	28.84	25.72	flush	s.steel	Product on probe (DNAPL)
RW6-2	shallow	3.49	--	--	--	14.83	29.34	25.85	flush	s.steel	
RW6-3	shallow	3.96				5.45	28.72	24.76	flush	s.steel	Sediment on probe
RW7-1	shallow	5.75	--	--	--	16.57	26.25	20.50	flush	s.steel	Product on probe (DNAPL); orange floc.
RW7-2	shallow	6.16	--	--	--	16.84	26.48	20.32	flush	s.steel	Sediment on probe.
RW7-3	shallow	6.50	--	--	--	17.25	26.78	20.28	flush	s.steel	Sediment on probe.
RW7-4	shallow	6.87	--	--	--	19.02	27.11	20.24	flush	s.steel	Product on probe (DNAPL); sediment on probe
RW7-5	shallow	7.44	--	--	--	19.38	27.57	20.13	flush	s.steel	Sediment on probe.
RW7-6	shallow	6.79	--	--	--	15.00	26.48	19.69	flush	s.steel	
RW7-7	shallow	6.88	--	--	--	14.89	26.89	20.01	flush	s.steel	Sediment on probe.
RW7-8	shallow	5.41	--	--	--	14.99	25.90	20.49	flush	s.steel	Orange floc on probe
RW7-9	shallow	6.82	--	--	--	16.17	26.87	20.05	flush	s.steel	Orange floc on probe
RW7-10	shallow	6.85	--	--	--	14.18	26.10	19.25	flush	s.steel	Orange floc on probe
RW15-1	shallow	6.81	--	--	--	14.92	29.95	23.14	flush	s.steel	Sediment on probe.
RW15-2	shallow						30.15		flush	s.steel	Well not included in quarterly monitoring plan
P Series:											
P-1	shallow	6.57	--	--	--	9.73	30.09	23.52	flush	1.5" pvc	Sediment on probe.
P-2	shallow	WA	--	--	--	WA	30.19	WA	flush	1.5" pvc	Well was sealed on March 29, 1996.
PI Series:											
PI-1	deep						26.90		flush	8" s.steel	Well not included in quarterly monitoring plan

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TABLE 1: QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (7/11/96)
Former Hexcel Facility
Lodi, New Jersey

-All measurements in feet -
-All elevations in feet (NGVD)-

GEO Engineering
October 1996
File: 94039/wldata/Quartrly.xls
Entered by: SG Checked by: RMS

Well ID	Type	Depth to	Depth to Product		Product Thickness	Depth to	Elevation	Water Elevation	Well Construction (all 4" diameter unless otherwise noted)		
		Water (7/11/96)	DNAPL	LNAPL		Bottom (7/11/96)	Top of Casing		Type	Casing	Comments
CW Series:											
CW-1	shallow	7.17	--	--	--	11.48	29.77	22.60	flush	s.steel	
CW-2	shallow						29.51		flush	s.steel	Well not included in quarterly monitoring plan
CW-3	shallow						29.72		flush	s.steel	Recovery well; not included in monitoring plan
CW-4	shallow	6.07	--	--	--	10.99	28.83	22.76	flush	s.steel	
CW-5	shallow						28.67		flush	s.steel	Recovery well; not included in monitoring plan
CW-6	shallow						28.93		flush	s.steel	Well not included in quarterly monitoring plan
CW-7	shallow	7.20 *	--	7.01	1.55	14.00	26.13	18.93	flush	s.steel	The measured DTW is 8.56 ft.; refer to notes
CW-8	shallow	8.14	--	--	--	13.91	26.77	18.63	flush	s.steel	
CW-9	shallow						26.37		flush	s.steel	Recovery well; not included in monitoring plan
CW-10	shallow	7.14	--	--	--	10.23	25.91	18.77	flush	s.steel	
CW-11	shallow						25.74		vaultbox	s.steel	Recovery well; not included in monitoring plan
CW-12	shallow	7.02	--	--	--	13.98	25.71	18.69	flush	s.steel	Product on probe (DNAPL)
CW-13	shallow						26.05		flush	s.steel	Well not included in quarterly monitoring plan
CW-14	shallow	7.48	--	--	--	13.90	26.37	18.89	flush	s.steel	
CW-15	shallow						26.31		flush	s.steel	Recovery well; not included in monitoring plan
CW-16	shallow	7.07	--	--	--	13.92	26.45	19.38	flush	s.steel	Product on probe (DNAPL)
CW-17	shallow	N/A	--	--	--	N/A	26.25	N/A	flush	s.steel	Not accessible; pallets of drums covering the well
CW-18	shallow						26.61		flush	s.steel	Recovery well; not included in monitoring plan
CW-19	shallow						26.50		flush	s.steel	Well not included in quarterly monitoring plan
CW-20	shallow						26.74		flush	s.steel	Well not included in quarterly monitoring plan
CW-21	shallow						26.77		flush	s.steel	Recovery well; not included in monitoring plan
CW-22	shallow						26.35		flush	s.steel	Well not included in quarterly monitoring plan

882560012

TABLE 1: QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (7/11/96)

Former Hexcel Facility

Lodi, New Jersey

-All measurements in feet -

-All elevations in feet (NGVD)-

GEO Engineering

October 1996

File: 94039/wldata/Quartrly.xls

Entered by: SG Checked by: RMS

Well ID	Type	Depth to Water (7/11/96)	Depth to Product		Product Thickness	Depth to Bottom (7/11/96)	Elevation Top of Casing	Water Elevation	Well Construction (all 4" diameter unless otherwise noted)		
			DNAPL	LNAPL					Type	Casing	Comments
MW Series:											
MW-1	(a)	10.06	--	--	--	23.54	32.42	22.36	stickup	pvc	
MW-2	shallow	7.70	--	--	--	10.27	31.00	23.30	stickup	pvc	
MW-3	deep	10.35	--	--	--	30.77	31.13	20.78	stickup	pvc	
MW-4	shallow	7.92	--	--	--	9.93	32.33	24.41	stickup	pvc	
MW-5	deep	11.19	--	--	--	28.34	32.54	21.35	stickup	pvc	
MW-6	shallow	9.94	--	--	--	18.29	30.74	20.80	stickup	pvc	Product on probe (DNAPL)
MW-7	deep	9.65	--	--	--	32.91	30.68	21.03	stickup	pvc	
MW-8	shallow	11.64	--	--	--	17.35	30.26	18.62	stickup	pvc	Product on probe (DNAPL)
MW-9	deep	8.80	--	--	--	29.57	29.83	21.03	stickup	pvc	
MW-10	shallow	12.33	--	--	--	16.79	30.83	18.50	stickup	pvc	
MW-11	deep	10.01	--	--	--	33.51	30.78	20.77	stickup	pvc	
MW-12	shallow	10.41	--	--	--	17.19	31.01	20.60	stickup	pvc	
MW-13	deep	9.78	--	--	--	33.09	31.16	21.38	stickup	pvc	
MW-14	shallow	11.25	--	--	--	15.63	30.70	19.45	stickup	pvc	
MW-15	deep	8.91	--	--	--	25.63	30.77	21.86	stickup	pvc	
MW-16	shallow	6.73	--	--	--	12.66	29.69	22.96	stickup	pvc	
MW-17	shallow	9.16	--	--	--	14.11	31.44	22.28	stickup	pvc	
MW-18	shallow	8.71	--	--	--	11.37	32.23	23.52	stickup	pvc	
MW-19	deep	7.17	--	--	--	26.61	29.08	21.91	stickup	pvc	
MW-20	shallow	5.08	--	--	--	19.82	27.95	22.87	flush	pvc	
MW-21	shallow	8.66	--	--	--	15.14	30.67	22.01	stickup	pvc	
MW-22	shallow	5.49	--	--	--	8.24	28.45	22.96	flush	pvc	
MW-23	shallow	4.09	--	--	--	9.60	27.51	23.42	flush	pvc	Sediment on probe.
MW-24	shallow	3.45	--	--	--	9.67	26.51	23.06	flush	pvc	Orange floc on probe.
MW-25	shallow	7.26	--	--	--	12.74	26.03	18.77	flush	pvc	

TABLE 1: QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (7/11/96)
Former Hexcel Facility
Lodi, New Jersey

-All measurements in feet -
-All elevations in feet (NGVD)-

GEO Engineering
October 1996
File: 94039/wldata/Quartrly.xls
Entered by: SG Checked by: RMS

Well ID	Type	Depth to Water (7/11/96)	Depth to Product		Product Thickness	Depth to Bottom (7/11/96)	Elevation Top of Casing	Water Elevation	Well Construction (all 4" diameter unless otherwise noted)		
			DNAPL	LNAPL					Type	Casing	Comments
MW Series:											
MW-26	(b)	8.88	--	--	--	17.95	28.85	19.97	flush	2" pvc	
MW-27	shallow	7.09	--	--	--	12.55	31.43	24.34	stickup	pvc	
MW-28	shallow		--	--	--		29.68		stickup	pvc	Well inadvertently missed from the monitoring.
MW-29	shallow	3.89	--	--	--	9.36	27.32	23.43	flush	pvc	
MW-30	shallow	4.64	--	--	--	10.49	28.08	23.44	flush	pvc	Orange floc on probe
MW-31	shallow	4.61	--	--	--	10.62	27.95	23.34	flush	pvc	Orange floc on probe
MW-32	shallow	WA				WA	32.51	WA	stickup	pvc	Well was sealed on March 29, 1996.
MW-33	shallow	9.81	--	--	--	16.99	31.72	21.91	stickup	pvc	
PB Series:											
PB-1	shallow	0.60 ^	--	--	--	5.41	21.78	21.18	stickup	2" g.steel	
PB-2	shallow	1.18 ^	--	--	--	5.84	21.25	20.07	stickup	2" g.steel	
PB-4	shallow	1.33 ^	--	--	--	5.19	21.52	20.19	stickup	2" g.steel	

NOTES: All measurements of depths are from the top of casing unless otherwise noted.

-- : Not detected by product interface meter.

N/A : Well not accessible.

(a) : Subsurface investigation in December 1995 near MW-1 revealed that MW-1 is not a deep well; refer to Section 1a of the April 1996 Progress Report for detail

(b) : Construction data for MW-26 reveal that MW-26 is not a deep well; refer to Section 1a of the April 1996 Progress Report for details.

WA : Well was sealed on March 29, 1996. Refer to April 1996 Progress Report for details.

* : In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) - (Product thickness * specific gravity).
Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).

^ : Water level was measured by a tape measure.

Many of the wells have accumulated sediment which results in slight fluctuations in the measurements of depth to bottom.

TABLE 2: WELL CONSTRUCTION DATA

Former Hexcel Facility

Lodi, New Jersey

-All measurements in feet -
 -All elevations in feet (NGVD)-

GEO Engineering

October 1996

File: 94039/wldata/wellscrn.xls

Entered by : SG; Check: SKT

Well ID	Type	Ground Elevation	Elevation Top of Casing	Depth to Bottom (7/11/96)	Length of Screen	Elevation Top of Screen	Water Elevation (7/11/96)	Well Construction *		Installation		Water Table Elv. > Top of Screen Elv.
								Type	Casing	Date	By	
RW Series:												
RW1-1	shall.	28.67	28.24	14.30	10	23.67	23.33	flush	s.steel	10/91	Heritage	No
RW6-1	shall.	29.28	28.84	13.78	5	20.28	25.72	flush	s.steel	8/90	Heritage	Yes
RW6-2	shall.	U	29.34	14.83	5	U	25.85	flush	s.steel	8/90	Heritage	U
RW6-3	shall.	29.02	28.72	5.45	5	27.52	24.76	flush	s.steel	8/90	Heritage	No
RW7-1	shall.	26.94	26.25	16.57	5	13.94	20.50	flush	s.steel	8/90	Heritage	Yes
RW7-2	shall.	27.07	26.48	16.84	5	14.57	20.32	flush	s.steel	8/90	Heritage	Yes
RW7-3	shall.	27.17	26.78	17.25	5	14.67	20.28	flush	s.steel	8/90	Heritage	Yes
RW7-4	shall.	27.60	27.11	19.02	5	13.60	20.24	flush	s.steel	8/90	Heritage	Yes
RW7-5	shall.	27.97	27.57	19.38	5	12.97	20.13	flush	s.steel	9/90	Heritage	Yes
RW7-6	shall.	27.10	26.48	15.00	5	17.10	19.69	flush	s.steel	9/90	Heritage	Yes
RW7-7	shall.	27.25	26.89	14.89	5	17.25	20.01	flush	s.steel	9/90	Heritage	Yes
RW7-8	shall.	26.71	25.90	14.99	5	16.71	20.49	flush	s.steel	9/90	Heritage	Yes
RW7-9	shall.	27.18	26.87	16.17	5	15.18	20.05	flush	s.steel	2/91	Heritage	Yes
RW7-10	shall.	26.50	26.10	14.18	5	16.50	19.25	flush	s.steel	2/91	Heritage	Yes
RW15-1	shall.	30.43	29.95	14.92	10	25.68	23.14	flush	s.steel	8/90	Heritage	No
RW15-2	shall.	30.37	30.15		10	26.37	NI	flush	s.steel	8/90	Heritage	NI
P Series:												
P-1	shall.	U	30.09	9.73	U	U	23.52	flush	1.5" pvc	U	U	U
P-2	shall.	U	30.19	WA	U	U	WA	flush	1.5" pvc	U	U	U, WA
PI Series:												
PI-1	deep	U	26.90		U	U	NI	flush	s.steel	10/91	Heritage	^

TABLE 2: WELL CONSTRUCTION DATA
Former Hexcel Facility
Lodi, New Jersey

-All measurements in feet -
-All elevations in feet (NGVD)-

GEO Engineering
October 1996
File: 94039/wldata/wellscrn.xls
Entered by : SG; Check: SKT

Well ID	Type	Ground Elevation	Elevation Top of Casing	Depth to Bottom (7/11/96)	Length of Screen	Elevation Top of Screen	Water Elevation (7/11/96)	Well Construction *		Installation		Water Table Elv. > Top of Screen Elv.
								Type	Casing	Date	By	
CW Series:												
CW-1	shall.	30.27	29.77	11.48	5	23.27	22.60	flush	s. steel	9/90	Heritage	No
CW-2	shall.	30.11	29.51		5	23.11	NI	flush	s. steel	9/90	Heritage	NI
CW-3	recov.	U	29.72		5	U	NI	flush	s. steel	9/90	Heritage	NI
CW-4	shall.	29.10	28.83	10.99	5	22.60	22.76	flush	s. steel	7/90	Heritage	Yes
CW-5	recov.	28.89	28.67		5	22.39	NI	flush	s. steel	7/90	Heritage	NI
CW-6	shall.	29.25	28.93		5	25.25	NI	flush	s. steel	9/90	Heritage	NI
CW-7	shall.	26.70	26.13	14.00	5	17.70	18.93	flush	s. steel	8/90	Heritage	Yes
CW-8	shall.	26.70	26.77	13.91	5	17.70	18.63	flush	s. steel	8/90	Heritage	Yes
CW-9	recov.	26.60	26.37		5	17.60	NI	flush	s. steel	8/90	Heritage	NI
CW-10	shall.	26.50	25.91	10.23	5	17.50	18.77	flush	s. steel	8/90	Heritage	Yes
CW-11	recov.	26.60	25.74		5	17.60	NI	vaultbox	s. steel	8/90	Heritage	NI
CW-12	shall.	26.51	25.71	13.98	5	17.51	18.69	flush	s. steel	8/90	Heritage	Yes
CW-13	shall.	26.60	26.05		5	17.60	NI	flush	s. steel	8/90	Heritage	NI
CW-14	shall.	26.70	26.37	13.90	5	17.70	18.89	flush	s. steel	8/90	Heritage	Yes
CW-15	recov.	26.90	26.31		5	17.90	NI	flush	s. steel	8/90	Heritage	NI
CW-16	shall.	27.00	26.45	13.92	5	18.00	19.38	flush	s. steel	8/90	Heritage	Yes
CW-17	shall.	27.10	26.25	N/A	5	18.10	N/A	flush	s. steel	8/90	Heritage	N/A
CW-18	recov.	27.20	26.61		5	18.20	NI	flush	s. steel	8/90	Heritage	NI
CW-19	shall.	27.20	26.50		5	18.20	NI	flush	s. steel	8/90	Heritage	NI
CW-20	shall.	27.30	26.74		5	18.30	NI	flush	s. steel	8/90	Heritage	NI
CW-21	recov.	27.40	26.77		5	18.40	NI	flush	s. steel	8/90	Heritage	NI
CW-22	shall.	27.30	26.35		5	18.30	NI	flush	s. steel	8/90	Heritage	NI

882560016

TABLE 2: WELL CONSTRUCTION DATA
Former Hexcel Facility
Lodi, New Jersey

-All measurements in feet -
-All elevations in feet (NGVD)-

GEO Engineering
October 1996
File: 94039/wldata/wellscrn.xls
Entered by : SG; Check: SKT

Well ID	Type	Ground Elevation	Elevation Top of Casing	Depth to Bottom (7/11/96)	Length of Screen	Elevation Top of Screen	Water Elevation (7/11/96)	Well Construction *		Installation		Water Table Elv. > Top of Screen Elv.
								Type	Casing	Date	By	
MW Series:												
MW-1	(a)	29.03	32.42	23.54	5	13.88	22.36	stickup	pvc	7/88	Environ	(a)
MW-2	shall.	27.90	31.00	10.27	5	26.13	23.30	stickup	pvc	8/88	Environ	No
MW-3	deep	27.84	31.13	30.77	5	5.30	20.78	stickup	pvc	8/88	Environ	^
MW-4	shall.	29.02	32.33	9.93	5	27.49	24.41	stickup	pvc	8/88	Environ	No
MW-5	deep	29.03	32.54	28.34	5	9.12	21.35	stickup	pvc	8/88	Environ	^
MW-6	shall.	27.14	30.74	18.29	10	22.12	20.80	stickup	pvc	8/88	Environ	No
MW-7	deep	27.18	30.68	32.91	5	2.55	21.03	stickup	pvc	7/88	Environ	^
MW-8	shall.	26.92	30.26	17.35	10	22.98	18.62	stickup	pvc	8/88	Environ	No
MW-9	deep	26.89	29.83	29.57	5	5.09	21.03	stickup	pvc	7/88	Environ	^
MW-10	shall.	27.33	30.83	16.79	11	24.81	18.50	stickup	pvc	8/88	Environ	No
MW-11	deep	27.28	30.78	33.51	10	6.86	20.77	stickup	pvc	7/88	Environ	^
MW-12	shall.	27.62	31.01	17.19	10	24.05	20.60	stickup	pvc	8/88	Environ	No
MW-13	deep	27.63	31.16	33.09	5	2.89	21.38	stickup	pvc	7/88	Environ	^
MW-14	shall.	27.12	30.70	15.63	9	24.18	19.45	stickup	pvc	8/88	Environ	No
MW-15	deep	27.17	30.77	25.63	5	10.13	21.86	stickup	pvc	7/88	Environ	^
MW-16	shall.	26.71	29.69	12.66	5	22.14	22.96	stickup	pvc	8/88	Environ	Yes
MW-17	shall.	29.10	31.44	14.11	8	25.10	22.28	stickup	pvc	1/89	Environ	No
MW-18	shall.	29.04	32.23	11.37	5	25.97	23.52	stickup	pvc	8/88	Environ	No
MW-19	deep	27.30	29.08	26.61	5	7.30	21.91	stickup	pvc	1/89	Environ	^
MW-20	shall.	28.50	27.95	19.82	5	13.50	22.87	flush	pvc	11/90	Heritage	Yes
MW-21	shall.	28.80	30.67	15.14	10	25.80	22.01	stickup	pvc	9/90	Heritage	No
MW-22	shall.	28.73	28.45	8.24	5	25.73	22.96	flush	pvc	12/90	Heritage	No
MW-23	shall.	27.83	27.51	9.60	5	22.83	23.42	flush	pvc	11/90	Heritage	Yes
MW-24	shall.	26.93	26.51	9.67	5	21.93	23.06	flush	pvc	11/90	Heritage	Yes
MW-25	shall.	26.47	26.03	12.74	10	23.47	18.77	flush	pvc	9/90	Heritage	No

882560017

TABLE 2: WELL CONSTRUCTION DATA
Former Hexcel Facility
Lodi, New Jersey

-All measurements in feet -
-All elevations in feet (NGVD)-

GEO Engineering
October 1996
File: 94039/wldata/wellscrn.xls
Entered by : SG; Check: SKT

Well ID	Type	Ground Elevation	Elevation Top of Casing	Depth to Bottom (7/11/96)	Length of Screen	Elevation Top of Screen	Water Elevation (7/11/96)	Well Construction *		Installation		Water Table Elv > Top of Screen
								Type	Casing	Date	By	Elv.
MW Series:												
MW-26	(b)	29.26	28.85	17.95	2	12.26	19.97	flush	2" pvc	12/90	Heritage	(b)
MW-27	shall.	29.10	31.43	12.55	5	24.10	24.34	stickup	pvc	9/90	Heritage	Yes
MW-28	shall.	27.50	29.68	N/A	10	24.50	N/A	stickup	pvc	9/90	Heritage	N/A
MW-29	shall.	27.50	27.32	9.36	5	22.50	23.43	flush	pvc	2/91	Heritage	Yes
MW-30	shall.	28.25	28.08	10.49	5	22.25	23.44	flush	pvc	2/91	Heritage	Yes
MW-31	shall.	28.33	27.95	10.62	5	22.33	23.34	flush	pvc	2/91	Heritage	Yes
MW-32	shall.	U	32.51	WA	6	U	WA	stickup	pvc	4/92	Heritage	WA
MW-33	shall.	U	31.72	16.99	10	U	21.91	stickup	pvc	4/92	Heritage	U
PB Series:												
PB-1	shallow	17.46	21.78	5.41	1	16.46	21.18	stickup	2" g.steel	6/95	GEO	Yes
PB-2	shallow	17.50	21.25	5.84	1	16.70	20.07	stickup	2" g.steel	6/95	GEO	Yes
PB-4	shallow	17.52	21.52	5.19	1	16.72	20.19	stickup	2" g.steel	6/95	GEO	Yes

NOTES: Refer to "Table 2: Summary of Well Construction Data " provided in Appendix B of Progress Report dated July 31, 1995 for the list of sources used for compiling this table.

All measurements of depths are from the top of casing unless otherwise noted.

N/A: Well was inaccessible on the day of quarterly monitoring.

NI: Well not included in the quarterly monitoring.

U: Unknown.

*: All wells 4" diameter unless otherwise noted.

^: Well is screened in the confined aquifer, therefore, the question is not applicable.

(a): Ground water elevation data from MW-1 have been excluded from both shallow and deep aquifer contours; refer to Section 1a of the April 1996 Report for details.

(b): Ground water elevation data from MW-26 have been excluded from both shallow and deep aquifer contours; refer to Section 1a of the April 1996 Report for details.

WA: P-2 and MW-32 were sealed on March 29, 1996; refer to April 1996 Progress Report text for details.

Contour Map Reporting Form

Site Name: Former Hexcel Facility, Lodi, NJ
Project No.: 94039

Figure No.: 1
Water levels taken on 7/11/96
Page 1 of 2

1. Did any surveyed well casing elevations change from the previous sampling event? ☐ Yes
If yes, attach new "Well Certification -Form B" and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.) ☒ No

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? ☒ Yes
If yes, identify these wells. ☐ No

Monitor wells for which the water table elevations are higher than the top of the well screen are identified in Table 2: Summary of Well Construction Data provided in Appendix A.

3. Are there any monitor wells present at the site but omitted from the contour map? ☒ Yes
Unless the omission of the well(s) has been previously approved by the Department, justify the omissions. ☐ No

Quarterly ground water elevation monitoring plan approved by NJDEP in its June 12, 1995 letter. For information on additional omissions, please refer to Figure 1 and Table 1.

4. Are there any monitor wells containing separate phase product during this measuring event? ☒ Yes
Were any of the monitor wells with separate phase product included in the ground water contour map? ☐ No
If yes show the formula used to correct the water table elevation. ☒ Yes
☐ No

Depth to water (corrected) = Depth to water (measured) - (Product thickness x specific gravity). Specific gravity of 0.88 (specific gravity of petroleum lubricating oil is used as representative) is used for water level correction.

5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? ☐ Yes
If yes, discuss the reasons for the change. ☒ No

6. Has ground water mounding and/or depressions been identified in the ground water contour map? ☒ Yes
Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence. ☐ No

It is not known why mounding occurs in the vicinity of building 2.

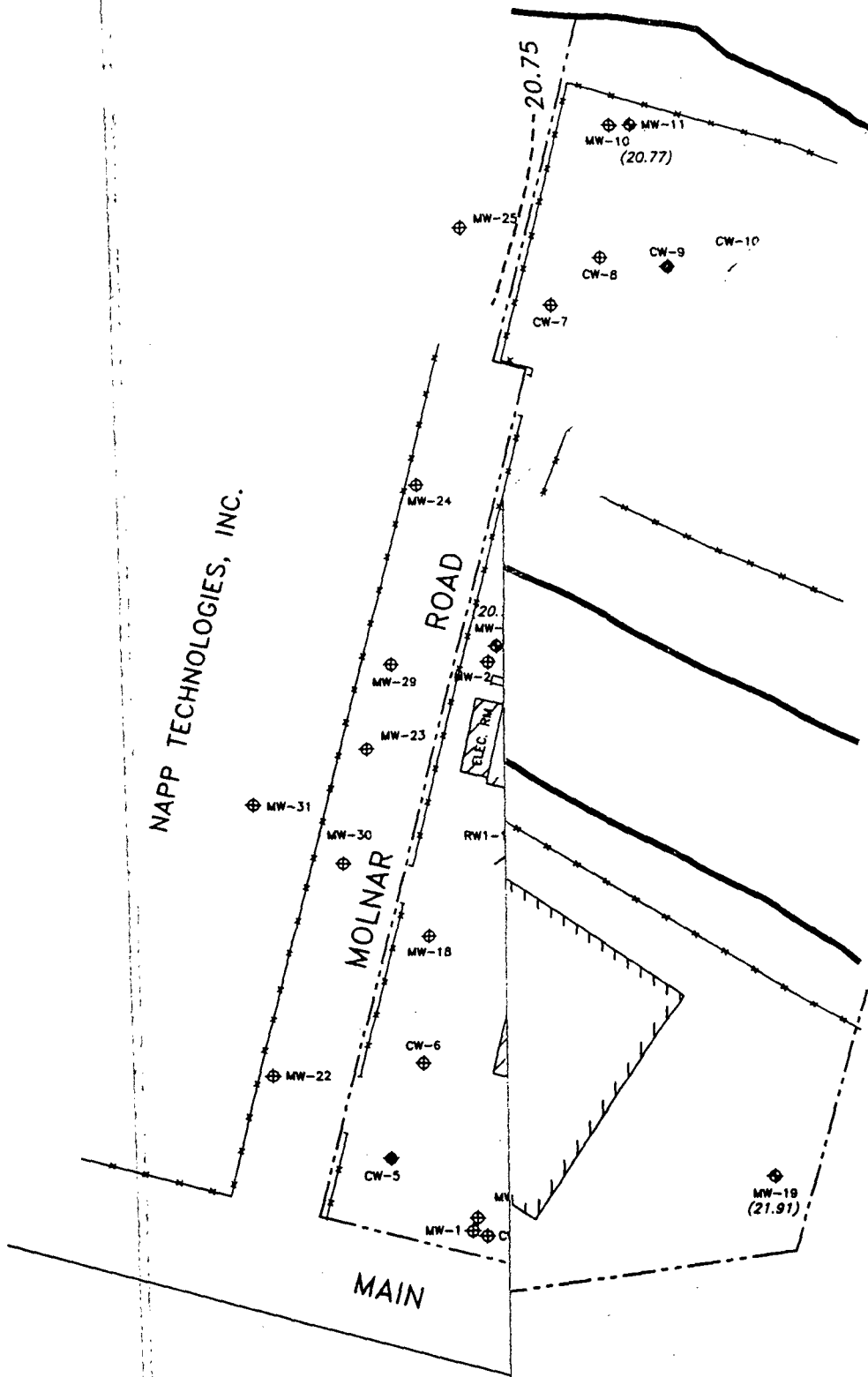
Site Name: Former Hexcel Facility, Lodi, NJ
Project No.: 94039

Figure No.: 1
Water levels taken on 7/11/96
Page 2 of 2

7. Are all the wells used in the contour map screened in the same water-bearing zone? ☒ Yes
If no, justify inclusion of those wells. ☐ No

8. Were the ground water contours
☒ computer generated, ☐ computer aided, or ☐ hand-drawn?
If computer aided or generated, identify the interpolation method(s) used.

Kriging Routine

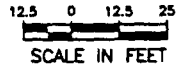


NAPP TECHNOLOGIES, INC.

ROAD

MOLNAR

MAIN



GROUND WATER
ION CONTOURS ON
7/11/96

REV.
Ø

GEO FILE No.
94039

DATE
OCTOBER
1996

FIGURE
2

ER HEXCEL FACILITY
DDI, NEW JERSEY

GEO Engineering

DOVER, N.J.
(201) 361-3600

CONTOURS

882560021

Contour Map Reporting Form

Site Name: Former Hexcel Facility, Lodi, NJ
Project No.: 94039

Figure No.: 2
Water levels taken on 7/11/96
Page 1 of 1

1. Did any surveyed well casing elevations change from the previous sampling event? ☐ Yes
If yes, attach new "Well Certification -Form B" and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.) ☒ No

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? ☐ Yes
If yes, identify these wells. ☐ No

Not applicable because confined aquifer.

3. Are there any monitor wells present at the site but omitted from the contour map? ☐ Yes
Unless the omission of the well(s) has been previously approved by the Department, justify the omissions. ☒ No

4. Are there any monitor wells containing separate phase product during this measuring event? ☐ Yes
☒ No
Were any of the monitor wells with separate phase product included in the ground water contour map? ☐ Yes
If yes show the formula used to correct the water table elevation. ☒ No

5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? ☐ Yes
If yes, discuss the reasons for the change. ☒ No

6. Has ground water mounding and/or depressions been identified in the ground water contour map? ☐ Yes
Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence. ☒ No

7. Are all the wells used in the contour map screened in the same water-bearing zone? ☒ Yes
If no, justify inclusion of those wells. ☐ No

8. Were the ground water contours
☒ computer generated, ☐ computer aided, or ☐ hand-drawn?
If computer aided or generated, identify the interpolation method(s) used.

Kriging method.

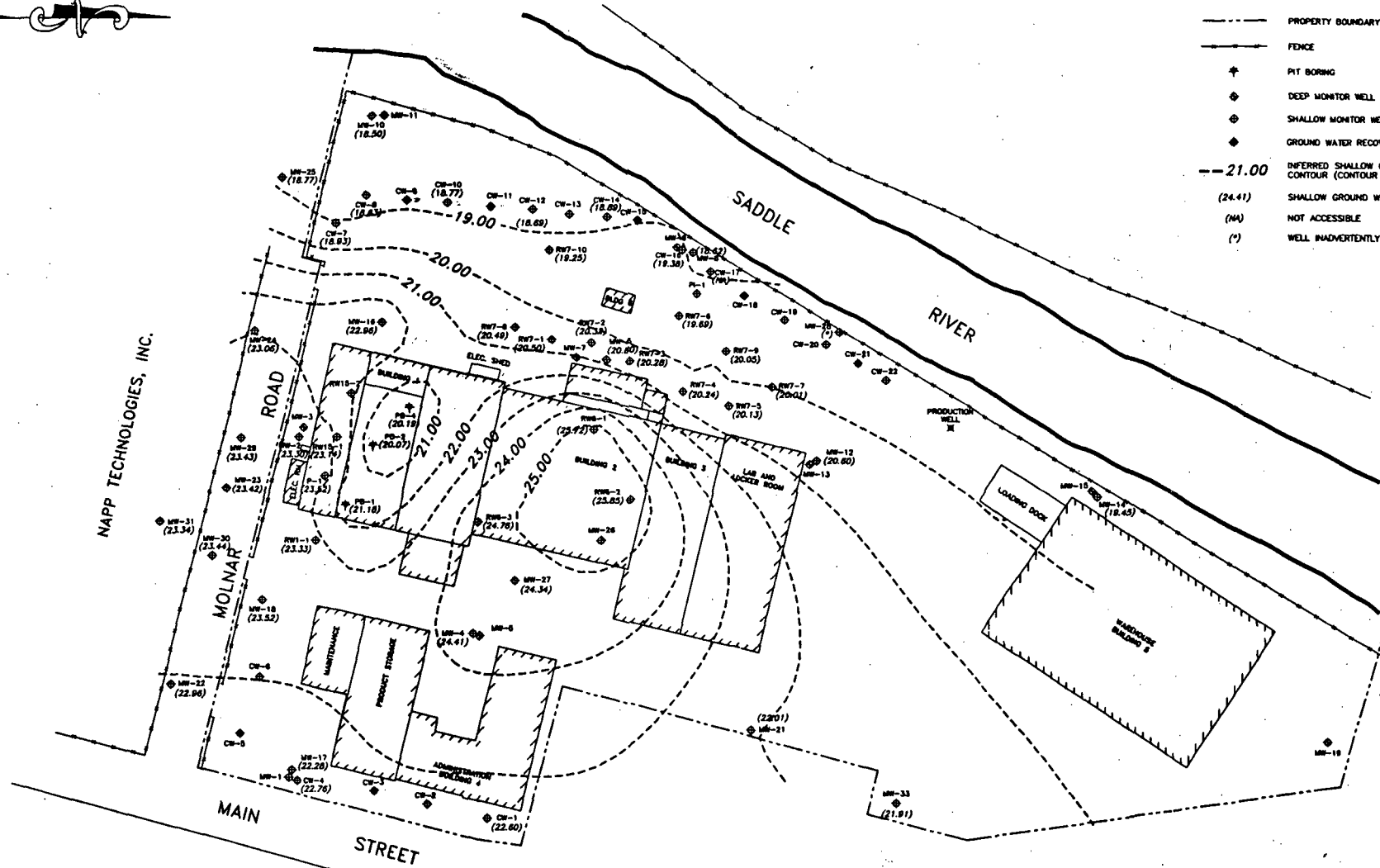
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882560022

882560023

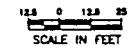
LEGEND

- PROPERTY BOUNDARY
- FENCE
- ✦ PIT BORING
- ◆ DEEP MONITOR WELL
- ◆ SHALLOW MONITOR WELL
- ◆ GROUND WATER RECOVERY WELL
- 21.00 INFERRED SHALLOW GROUND WATER ELEVATION CONTOUR (CONTOUR INTERVAL 1.00 FT.)
- (24.41) SHALLOW GROUND WATER ELEVATION, FT. NGVD
- (NA) NOT ACCESSIBLE
- (*) WELL INADVERTENTLY OMITTED DURING MONITORING



NOTES:

1. BASE PLAN PROVIDED BY KILLAM ASSOCIATES.
2. ALL ELEVATIONS IN FEET, NGVD (NATIONAL GEODETIC VERTICAL DATUM).
3. CONTOURS WERE COMPUTER-GENERATED USING A KRODING ROUTINE.
4. REFER TO TABLE 1 FOR LIST OF WELLS WHICH WERE USED TO GENERATE THE SHALLOW GROUND WATER ELEVATION CONTOURS.
5. WATER LEVEL IN THE BASEMENT IS PUMPED TO THE LEVEL OF THE FLOOR. THE SURFACE ELEVATION OF THE FLOOR IS APPROXIMATELY 17.5'.



**SHALLOW GROUND WATER
ELEVATION CONTOURS ON
7/11/96**

FORMER HEXCEL FACILITY
LODI, NEW JERSEY

REV.	GEO FILE No.	DATE	FIGURE
0	94039	OCTOBER 1996	1

GEO Engineering

OWNER, N.J.
(908) 381-3600

Appendix B

882560024

**TABLE 3: SUMMARY OF MONTHLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS
FOR AUGUST 1996
Former Hexcel Facility
Lodi, New Jersey**

GEO Engineering
October 1996
File: 94039/wldata/Monthly.xls
Entered by: SG Check: RMS

-All measurements in feet -
-All elevations in feet (NGVD)-

MEASUREMENTS COLLECTED : 8/29/96

Well ID	Type	Depth to Water	Depth to Product		Product Thickness	Depth to Bottom	Elevation Top of Casing	Water Elevation	Comments
			DNAPL	LNAPL					
CW-7	shallow	7.50	--	--	--	13.97	26.13	18.63	
CW-12	shallow	7.40	--	--	--	13.95	25.71	18.31	Product on probe (DNAPL)**
CW-16	shallow	7.94	--	--	--	13.70	26.45	18.51	
MW-6	shallow	10.26	--	--	--	18.31	30.74	20.48	Product on probe (DNAPL)**
MW-8	shallow	12.14	--	--	--	17.34	30.26	18.12	Product on probe (DNAPL)**
MW-23	shallow	4.72	--	--	--	9.64	27.51	22.79	Sediment on probe
RW6-1	shallow	3.11	--	--	--	13.74	28.84	25.73	Product on probe (DNAPL)**
RW7-1	shallow	6.09	--	--	--	16.64	26.25	20.16	Product on probe (DNAPL)**; sediment on probe
RW7-4	shallow	7.16	--	--	--	19.10	27.11	19.95	Product on probe (DNAPL)**
PB-2	shallow	1.70	--	--	--	5.80	21.25	19.55	Product on probe (DNAPL)**; sediment on probe

- NOTES: All measurements of depths are from the top of casing unless otherwise noted.
Many of the wells have accumulated sediment which results in slight fluctuations in the measurements of depth to bottom.
-- Not detected by product interface meter.
* - In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) - (Product thickness * specific gravity).
Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).
** - Though the product-interface meter did not register presence of product in the well, product was observed on the probe.

882560025

**TABLE 4: SUMMARY OF MONTHLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS
FOR SEPTEMBER 1996
Former Hexcel Facility
Lodi, New Jersey**

GEO Engineering
October 1996
File: 94039/wldata/Monthly.xls
Entered by: SG Check: RMS

-All measurements in feet -
-All elevations in feet (NGVD)-

MEASUREMENTS COLLECTED : 9/23/96

Well ID	Type	Depth to Water	Depth to Product		Product Thickness	Depth to Bottom	Elevation Top of Casing	Water Elevation	Comments
			DNAPL	LNAPL					
CW-7	shallow	7.31	--	--	--	13.99	26.13	18.82	
CW-12	shallow	7.10	--	--	--	13.96	25.71	18.61	Product on probe (DNAPL)**
CW-16	shallow	7.50	--	--	--	13.92	26.45	18.95	Product on probe (DNAPL)**
MW-6	shallow	10.27	--	--	--	18.30	30.74	20.47	Product on probe (DNAPL)**
MW-8	shallow	11.69	--	--	--	17.33	30.26	18.57	Product on probe (DNAPL)**
RW6-1	shallow	3.14	--	--	--	13.72	28.84	25.70	Product on probe (DNAPL)**
RW7-1	shallow	5.89	--	--	--	16.60	26.25	20.36	Product on probe (DNAPL)**
RW7-4	shallow	7.97	--	--	--	19.01	27.11	19.14	Product on probe (DNAPL)**
PB-2	shallow	0.80	--	--	--	5.81	21.25	20.45	Product on probe (DNAPL)**; sediment on probe

NOTES: All measurements of depths are from the top of casing unless otherwise noted.

Many of the wells have accumulated sediment which results in slight fluctuations in the measurements of depth to bottom.

-- Not detected by product interface meter.

* - In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) - (Product thickness * specific gravity).
Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).

** - Though the product-interface meter did not register presence of product in the well, product was observed on the probe.

882560026

Appendix C

TABLE 5: SUMMARY OF PRODUCT COLLECTION (DNAPL)

Former Hexcel Facility

Lodi, New Jersey

GEO Engineering

October 1996

File: 94039\prodcoll\prodcol2.xls

Sheet: Third QD'96 (DEP)

All Quantities are Expressed in Gallons Rounded to the Nearest 0.1

DATE	MW-6 (DNAPL)	MW-8 (DNAPL)	MW-26 (DNAPL)	RW6-1 (DNAPL)	RW7-1 (DNAPL)	RW7-4 (DNAPL)	RW7-5 (DNAPL)	CW-12 (DNAPL)	CW-16 (DNAPL)	PB-2 (DNAPL)	CW-15^ (DNAPL)	TOTAL VOLUME RECOVERED
7/3/96	--	*	*	*	*	*	*	*	*	--	*	↓
7/11/96 (Quarterly)	--	--	--	--	--	--	--	--	--	--	*	
7/19/96	0.4	*	*	*	*	*	*	--	--	--	*	
7/25/96	--	*	*	*	*	*	*	--	--	--	*	
8/2/96	0.2	*	*	*	*	*	*	--	--	--	*	
8/9/96	--	*	*	*	*	*	*	--	--	0.1	*	
8/16/96	--	*	*	*	*	*	*	--	--	--	*	
8/21/96	--	*	*	*	*	*	*	--	--	--	*	
8/29/1996 (Monthly)	--	--	*	--	--	--	*	--	--	--	*	
9/6/96	--	*	*	*	*	*	*	--	--	--	*	
9/12/96	--	*	*	*	*	*	*	--	--	--	*	
9/20/96	--	*	*	*	*	*	*	*	*	--	*	
9/23/96 (Monthly)	--	--	*	--	--	--	*	--	--	--	*	
TOTAL VOLUME RECOVERED, 3rd QUARTER, 1996	0.6	--	--	--	--	--	--	--	--	0.1	--	0.7
TOTAL VOLUME RECOVERED, 2nd QUARTER 1996	1.1	--	--	--	--	--	--	--	--	0.9	--	2.0
TOTAL VOLUME RECOVERED, 10/94 - 3/96	12.1	1.0	0.4	0.1	0.3	--	--	0.7	0.4	3.1	0.8	18.9
TOTAL VOLUME RECOVERED (TOTAL SINCE 10/94)	13.8	1.0	0.4	0.1	0.3	--	--	0.7	0.4	4.1	0.8	21.6

Notes: For product recovery purposes, quantities greater than 0.1 gallons (approx. 1 cup) are considered to be "measurable". It is not practicable to separate product from mixture of water and product when quantity is less than 1 cup.

* Well not included in the weekly product recovery program.

-- i) Well was monitored and did not indicate recoverable product or ii) no measurable amount of product was recovered either by bailing or pumping.

^ CW-15 was removed from the product recovery program on 11/22/95 because ground water recovery equipment was re-installed in the well.

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TABLE 6: SUMMARY OF PRODUCT COLLECTION (LNAPL)

Former Hexcel Facility
Lodi, New Jersey

GEO Engineering

October 1996

File: 94039\prodcoll\prodcol2.xls

Sheet: Second QL '96 (DEP)

All Quantities are Expressed in Gallons Rounded to the Nearest 0.1

DATE	MW-6 (LNAPL)	MW-8 (LNAPL)	MW-23 (LNAPL)	RW1-1 (LNAPL)	RW 6-1 (LNAPL)	RW7-4 (LNAPL)	RW7-5 (LNAPL)	CW-7 (LNAPL)	CW-12 (LNAPL)	CW-15^ (LNAPL)	CW-16 (LNAPL)	MW-17 (LNAPL)	RW 15-1 (LNAPL)	TOTAL VOLUME RECOVERED
7/3/96	*	*	*	*	*	*	*	*	*	*	*	*	*	↓
7/11/96 (Quarterly)	--	--	--	--	--	--	--	--	--	*	--	--	--	
7/19/96	*	*	*	*	*	*	*	0.1	*	*	*	*	*	
7/25/96	*	*	*	*	*	*	*	--	*	*	*	*	*	
8/2/96	*	*	*	*	*	*	*	--	*	*	*	*	*	
8/9/96	*	*	*	*	*	*	*	--	*	*	*	*	*	
8/16/96	*	*	*	*	*	*	*	0.3	*	*	*	*	*	
8/21/96	*	*	*	*	*	*	*	0.1	*	*	*	*	*	
8/29/1996 (Monthly)	--	--	--	*	--	--	*	--	--	*	--	*	*	
9/6/96	*	*	*	*	*	*	*	--	*	*	*	*	*	
9/12/96	*	*	*	*	*	*	*	--	*	*	*	*	*	
9/20/96	*	*	*	*	*	*	*	--	*	*	*	*	*	
9/23/1996 (Monthly)	--	--	*	*	--	--	*	--	--	*	--	*	*	
TOTAL VOLUME RECOVERED, 3rd QUARTER, 1996	--	--	--	--	--	--	--	0.5	--	--	--	--	--	0.5
TOTAL VOLUME RECOVERED, 2nd QUARTER 1996	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL VOLUME RECOVERED, 10/94 - 3/96	6.7	--	--	--	--	--	--	0.8	--	--	--	--	--	7.5
TOTAL VOLUME RECOVERED (TOTAL SINCE 10/94)	6.7	--	--	--	--	--	--	1.3	--	--	--	--	--	8.0

Notes: For product recovery purposes, quantities greater than 0.1 gallons (approx. 1 cup) are considered to be "measurable". It is not practicable to separate product from mixture of water and product when quantity is less than 1 cup.

* Well not included in the weekly product recovery.

-- i) Monitoring did not indicate recoverable product or ii) no measurable amount of LNAPL was recovered in the absorbent pad.

^ CW-15 was removed from the product recovery program on 11/22/95 because ground water recovery equipment was re-installed in the well.

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Appendix D

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TABLE 7. ESTIMATED SCHEDULE OF REMAINING REMEDIAL ACTIVITIES
Former Hexcel Facility
Lodi, New Jersey

October 1996

File: 94039\sched4.xls

1996

TASK DESCRIPTION	1	2	3	4	5	6	7	8	9	10	11	12
GROUND WATER REMEDIATION												
DNAPL/LNAPL recovery (temporary)												
Recover water from basement Bldg. 1												
Obtain air permit for pilot test												
Conduct hydraulic testing												
Conduct pilot test of recovery system												
Obtain off-site ground water data												
Modify design of ground water recov. sys.												
Prep. design proposal for recov. sys.												
NJDEP review of design proposal												
Install permanent recovery system												
Operate and maintain recovery system												
Evaluate need for DNAPL barrier												
Install deep well in vicinity of MW-1												
CLEANING OF SEWER LINE												
Cleanout/abandonment of sewer line												
Collect samples (and lab. analysis)												
Disposal of sludge/debris												
SOIL REMEDIATION												
Soil investigation												
Prepare soil investigation rpt./work plan												
NJDEP review of work plan												
Implement soil remediation												
SEDIMENT SAMPLING												
Prepare report of sediment sampling *												
REPORTING												
Prepare quarterly progress reports												
Prepare final report												
NJDEP review and site inspection												
Case closure												

* Report of historical sediment sampling is included in October, 1996 progress report.

TABLE 7. ESTIMATED SCHEDULE OF REMAINING REMEDIAL ACTIVITIES
Former Hexcel Facility
Lodi, New Jersey

October 1996

File: 94039\sched4.xls

1997

TASK DESCRIPTION	1	2	3	4	5	6	7	8	9	10	11	12
GROUND WATER REMEDIATION												
DNAPL/LNAPL recovery (temporary)												
Recover water from basement Bldg. 1												
Obtain air permit for pilot test												
Conduct hydraulic testing												
Conduct pilot test of recovery system												
Obtain off-site ground water data												
Modify design of ground water recov.sys.												
Prep. design proposal for recov. sys.												
NJDEP review of design proposal												
Install permanent recovery system												
Operate and maintain recovery system												
Evaluate need for DNAPL barrier												
Install deep well in vicinity of MW-1												
CLEANING OF SEWER LINE												
Cleanout/abandonment of sewer line												
Collect samples (and lab. analysis)												
Disposal of sludge/debris												
SOIL REMEDIATION												
Soil investigation												
Prepare soil investigation rpt./work plan												
NJDEP review of work plan												
Implement soil remediation												
SEDIMENT SAMPLING												
Prepare report of sediment sampling												
REPORTING												
Prepare quarterly progress reports												
Prepare final report												
NJDEP review and site inspection												
Case closure												

TABLE 7. ESTIMATED SCHEDULE OF REMAINING REMEDIAL ACTIVITIES
Former Hexcel Facility
Lodi, New Jersey

October 1996

File: 94039\sched4.xls

1998

TASK DESCRIPTION	1	2	3	4	5	6	7	8	9	10	11	12
GROUND WATER REMEDIATION												
DNAPL/LNAPL recovery (temporary)												
Recover water from basement Bldg. 1												
Obtain air permit for pilot test												
Conduct hydraulic testing												
Conduct pilot test of recovery system												
Obtain off-site ground water data												
Modify design of ground water recov. sys.												
Prep. design proposal for recov. sys.												
NJDEP review of design proposal												
Install permanent recovery system												
Operate and maintain recovery system												
Evaluate need for DNAPL barrier												
Install deep well in vicinity of MW-1												
CLEANING OF SEWER LINE												
Cleanout/abandonment of sewer line												
Collect samples (and lab. analysis)												
Disposal of sludge/debris												
SOIL REMEDIATION												
Soil investigation												
Prepare soil investigation rpt./work plan												
NJDEP review of work plan												
Implement soil remediation												
SEDIMENT SAMPLING												
Prepare report of sediment sampling												
REPORTING												
Prepare quarterly progress reports												
Prepare final report												
NJDEP review and site inspection												
Case closure												

TABLE 7. ESTIMATED SCHEDULE OF REMAINING REMEDIAL ACTIVITIES
Former Hexcel Facility
Lodi, New Jersey

October 1996

File: 94039\sched4.xls

1999

TASK DESCRIPTION	1	2	3	4	5	6	7	8	9	10	11	12
GROUND WATER REMEDIATION												
DNAPL/LNAPL recovery (temporary)												
Recover water from basement Bldg. 1												
Obtain air permit for pilot test												
Conduct hydraulic testing												
Conduct pilot test of recovery system												
Obtain off-site ground water data												
Modify design of ground water recov. sys.												
Prep. design proposal for recov. sys.												
NJDEP review of design proposal												
Install permanent recovery system												
Operate and maintain recovery system												
Evaluate need for DNAPL barrier												
Install deep well in vicinity of MW-1												
CLEANING OF SEWER LINE												
Cleanout/abandonment of sewer line												
Collect samples (and lab. analysis)												
Disposal of sludge/debris												
SOIL REMEDIATION												
Soil investigation												
Prepare soil investigation rpt./work plan												
NJDEP review of work plan												
Implement soil remediation												
SEDIMENT SAMPLING												
Prepare report of sediment sampling												
REPORTING												
Prepare quarterly progress reports												
Prepare final report												
NJDEP review and site inspection												
Case closure												

TABLE 7. ESTIMATED SCHEDULE OF REMAINING REMEDIAL ACTIVITIES
Former Hexcel Facility
Lodi, New Jersey

October 1996

File: 94039\sched4.xls

2000

TASK DESCRIPTION	1	2	3	4	5	6	7	8	9	10	11	12
GROUND WATER REMEDIATION												
DNAPL/LNAPL recovery (temporary)												
Recover water from basement Bldg. 1												
Obtain air permit for pilot test												
Conduct hydraulic testing												
Conduct pilot test of recovery system												
Obtain off-site ground water data												
Modify design of ground water recov. sys.												
Prep. design proposal for recov. sys.												
NJDEP review of design proposal												
Install permanent recovery system												
Operate and maintain recovery system												
Evaluate need for DNAPL barrier												
Install deep well in vicinity of MW-1												
CLEANING OF SEWER LINE												
Cleanout/abandonment of sewer line												
Collect samples (and lab. analysis)												
Disposal of sludge/debris												
SOIL REMEDIATION												
Soil investigation												
Prepare soil investigation rpt./work plan												
NJDEP review of work plan												
Implement soil remediation												
SEDIMENT SAMPLING												
Prepare report of sediment sampling												
REPORTING												
Prepare quarterly progress reports												
Prepare final report												
NJDEP review and site inspection												
Case closure												

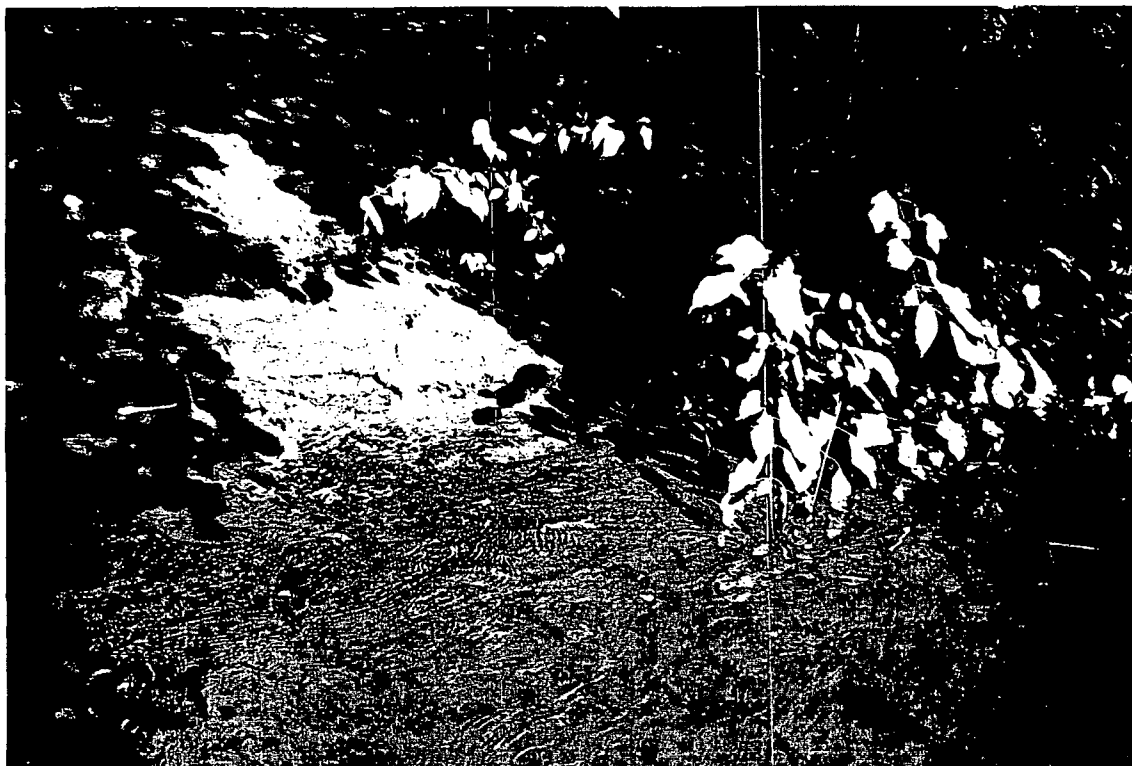
Appendix E

882560036



Photograph 1

*Storm sewer outfall (yellow-capped discharge pipe) to Saddle River
from the Napp Technologies, Inc. facility.*



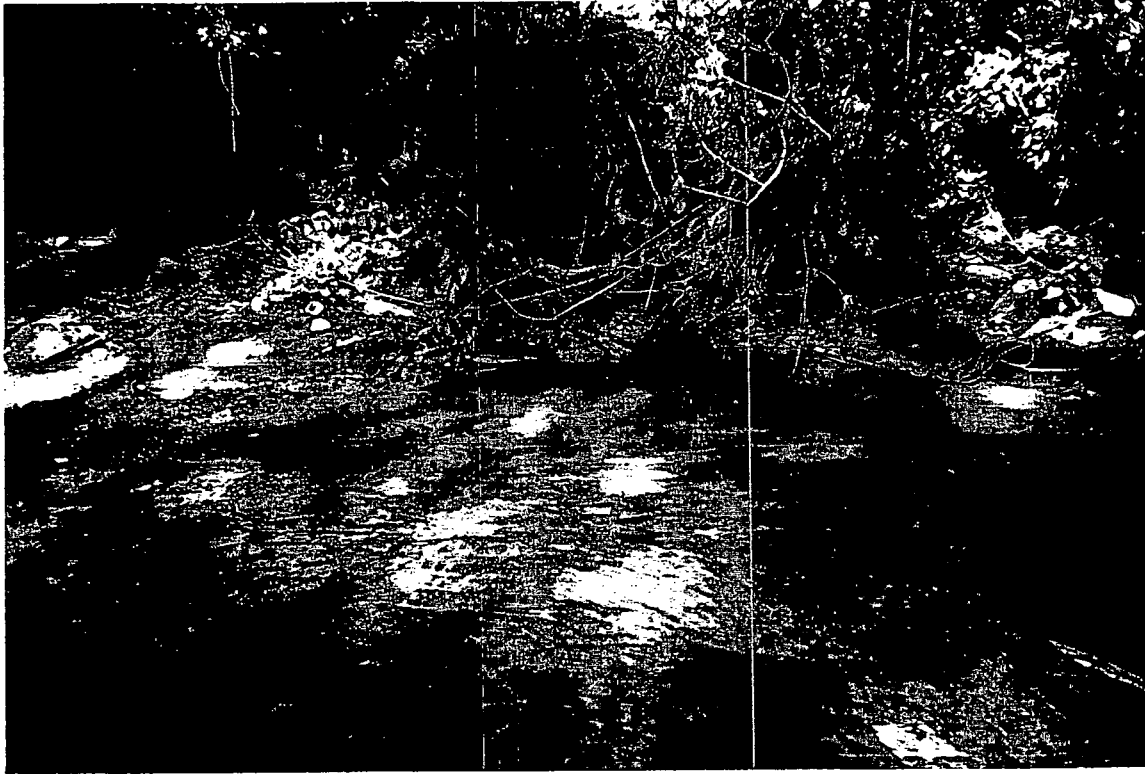
Photograph 2

*Bank of the Saddle River 600-700 feet downstream of the
Napp Technologies, Inc. storm sewer outfall.*

///GEO Engineering®

October 1996
Former Hexcel Facility
Lodi, New Jersey

882560037



Photograph 3

Bank of the Saddle River 600-700 feet upstream of the Napp Technologies, Inc. storm sewer outfall.